

LISTING OF THE CLAIMS:

Claims 1 to 7. (Canceled).

8. (Previously Presented) A converter, comprising:

a device adapted to sense currents fed to an electric motor powered by the converter, the device arranged inside the converter, signals of the device fed to a nonlinear filter, output signals of the nonlinear filter fed to an additional filter that is connected to an analog-to-digital converter.

9. (Previously Presented) The converter according to claim 8, wherein the analog-to-digital converter is integrated in one of (a) a microcontroller and (b) a microprocessor.

10. (Previously Presented) The converter according to claim 8, wherein the nonlinear filter includes a run-up transmitter.

11. (Previously Presented) The converter according to claim 10, wherein the run-up transmitter includes a comparator and an integrator.

12. (Previously Presented) The converter according to claim 8, wherein the additional filter includes a PT1 filter.

13. (Previously Presented) The converter according to claim 10, wherein a value corresponding to a rated current of the converter is attainable for the run-up transmitter in a time between 5 and 10 μs .

14. (Previously Presented) The converter according to claim 12, wherein the PT1 filter has a time constant having a value one of (a) between 15 and 25 μs and (b) approximately 20 μs .